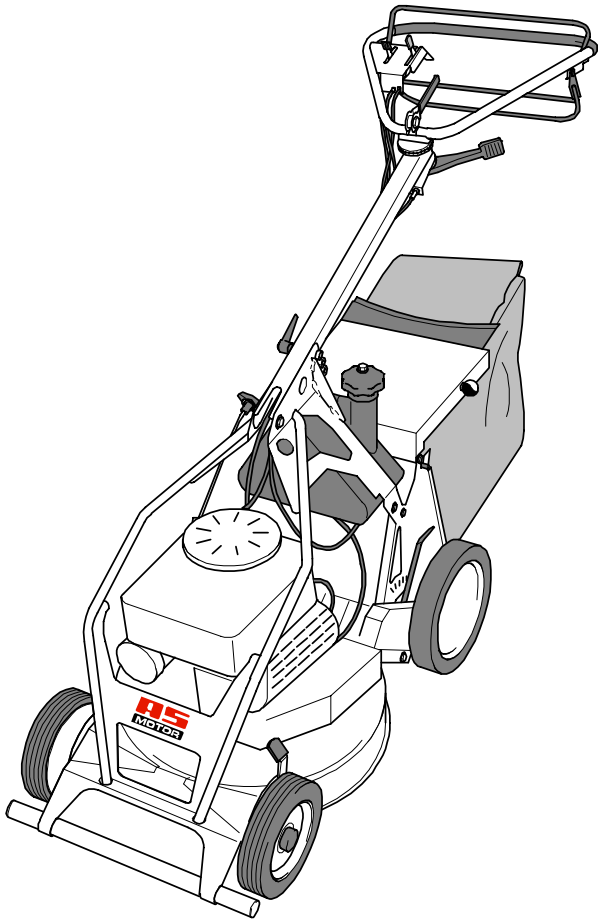
Operating Instructions

Lawnmower

AS 530/2T MK-Kat



From serial number: 020610020001
Issued: 16 July 2010,V11.0
EN-Translation of the Original Operating Instructions

Preface

Please fill in all data referring to your device. When ordering spare parts, provide your dealer with the device and engine number.

Serial number:

Engine number:

Date of purchase:

Address of dealer:

Dear customer:

Congratulations on your purchase. You have acquired a reliable quality product by “AS-Motor Germany”.

This product has been manufactured according to modern manufacturing methods and comprehensive quality assurance measures. Only when you are satisfied with your device, we have attained our goal.

Read these operating instructions carefully and attentively so that your device operates smoothly and you and others are safe from any hazards. If you have questions concerning your device, please contact your dealer or call our customer service (telephone +49/(0)7973/9123-0). For international AS partners, please see: www.as-motor.de/worldwide.

“AS-Motor Germany” wishes you much joy with your new device.

Intended use

The device is exclusively intended for mowing well maintained grassed lawn areas.

Only use attachments and cutting tools authorised by “AS-Motor Germany”.

Any use exceeding this purpose is inadmissible. The manufacturer is not responsible for any damage resulting from this. Observe the required maintenance and repair measures.

The user of the device is responsible for accidents or damage to other persons or their property!

The device **must not** be used:

- To cut hard objects, rocks, rubble, or pieces of wood.
- To trim bushes, hedges, and shrubbery.
- To cut plants in flower pots or planters or on rooftops.
- To clean (vacuum) footpaths.
- As shredder for shredding tree and hedge cuttings.
- As drive unit for work tools and any type of tool sets that are not authorised by “AS-Motor Germany”.

Contents

Preface 2

Intended use 2

Explanation of the symbols 4
- Symbols in the instructions 4
- Symbols on the device 4

Safety instructions 6
- Get informed! 6
- User restrictions and hours of operation 6
- Safe handling of fuel 6
- Check the device prior to use 7
- Use caution during operation 7
- Prior to mowing 7
- Use caution when mowing 7
- When work is completed 8
- Use caution during maintenance and repair 9

Device description 10

Control elements 11

Assembly 12
- Scope of delivery 12
- Unpacking 12
- Mounting guide bar and handlebar 12
- Inserting the starter rope 13
- Assembling the grass collection bag 13
- Mounting the grass collection bag 13

Transport 14

Information on mowing 14

Prior to starting 14
- Fuel 14
- Tanking up 15
- Adjusting cutting height 15

Starting 15
- Starting the device 16
- Engaging the blade 16

Driving 16
- Driving 16
- Turning 16

Emptying the grass collection bag 17

Switching off and parking 17

Maintenance and cleaning 18
- Preparations 20
- Cleaning the device 20
- General inspection 21
- Maintaining the engine 21
- Checking the spark plug 21
- Cleaning the air filter 21
- Re-adjusting the drive 21
- Checking the blade 22

Storage 23
- Storing the device 23
- Longer storage 23
- Restarting 23

Spare parts 23

Wear parts 23

Accessories 23

Disposal 24

Warranty 24

Troubleshooting 25

Mixing ratios fuel 28

Technical data 29

Declaration of conformity 30

Explanation of the symbols

Symbols in the instructions

In these operating instructions, the following symbols are used to denote special dangers.

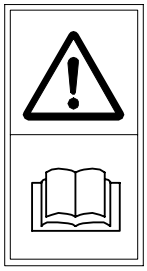
Warning.
These symbols denote special dangers.

Prohibition sign.
These symbols denote inadmissible procedures.

Directive sign.
These symbols denote required protective measures.

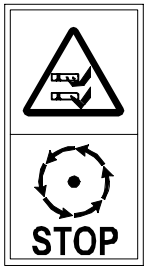
Symbols on the device

The following symbols are placed on the device to inform you must be careful and attentive when using the device:

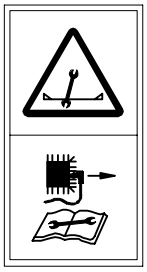


Working with the device requires extreme cautiousness. Read the operating instructions before you use the device.

Risk of injury!
Make sure that no one is within the danger zone of the device. Objects may be ejected. The danger zone extends for at least 15 metres.



The quickly rotating blade can cause life threatening injuries or immense property damage! Be especially careful to keep your hands and feet away from the blade when the device is put into operation.



Prior to any repair and maintenance work, pull off the spark plug connector.

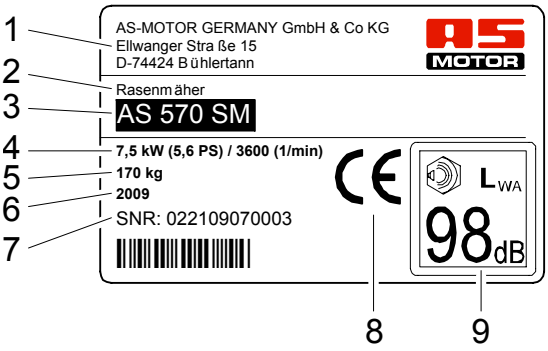
Clean the ventilation grid! The cooling air of the motor is sucked in through the ventilation grid of the engine cover. Always keep the entire surface open and free!

Noise is causing health problems. Use personal ear protection to avoid hearing damage.

Hot surface. Do not touch the engine or the silencer. They become very hot during operation and you can get burned.

Type plate

The type plate on the device provides you with information on the device type and the technical data.



1 Name and address of the manufacturer
2 Device designation
3 Type designation
4 Rated power output in kW / engine speed
5 Weight
6 Year of manufacture
7 Serial number
8 CE marking
9 Sound level L_{WA}

Safety instructions

Get informed!

For your safety, read these operating instructions with care. Familiarize yourself with the control elements and the proper use of the device. Share these operating instructions with other users of the device.

Before you use the device for the first time, let the dealer instruct you regarding safe use.

User restrictions and hours of operation

Never give your children or other persons who are not familiar with the operation instructions permission to use the device. Persons under 18 years old may operate the device only under supervision. Local regulations will determine the minimum age of the user and the hours of operation.

Unsuitable for the operation of the device are persons

- Who are under the influence of alcohol, drugs, or medicine that slows down reaction time.
- With physical and mental impairments.

People fitted with pace makers are not allowed to touch any current carrying parts of the ignition system.

Safe handling of fuel

Danger!
Fuel is toxic and highly inflammable.

Danger of fire and explosion!
Keep the fuel away from ignition sources and do not smoke while handling the device.
Do not inhale fuel vapours; they are dangerous to your health.

Use gloves and avoid skin contact with the fuel.

Fuel up outdoors only when the engine is cool and not running. Use a filler or funnel.

Do not spill any fuel and do not let the fuel get into the canalisation or ground water.

If you spilled fuel, do not start the device until the fuel vapours have evaporated (wipe dry). Move the device away from the area where the fuel was spilled.

Always close the tank cap securely and do not open it while the engine is running or the device is still hot.

Drain the fuel tank only when outdoors. Use a suitable container or run the tank empty.

Keep the fuel away from children and store it in a suitable container in a dark, cool, and dry location.

Never park the device with fuel in the tank inside a building where fuel vapours could come in contact with open fire or sparks.

Immediately replace a damaged fuel tank or tank cap (authorised dealership).

First aid

When swallowing fuel or inhaling fuel vapours, do not force vomiting and immediately consult a doctor.

In case of skin contact, immediately wash with water and soap. Change your soiled clothing as soon as you can.

Measures in case of a fire

In case of a fire, use foam, dry powder extinguisher, or carbon dioxide (CO_2). Never douse with water!

Check the device prior to use

Prior to use, check by visual inspection blade, drive and fastening parts for proper condition and firm seating.

Never use the device if covers, impact protection flap or grass collection bag is not installed.

Do not remove, change or override any safety devices or control elements.

Observe the maintenance instructions and replace damaged or worn parts immediately.

Have an authorised service centre check your device if the blade does not stop within 3 seconds after switching off.

Use caution during operation

Do not start the engine:

- if fuel was spilled.
- in closed or poorly ventilated rooms (danger of poisoning!).
- if there are other persons nearby.

Only start the device when your feet are at a safe distance to the blade.

During startup of the engine, do not tilt the device.

Do not touch the engine or the silencer. They become very hot during operation and you can get burned. Resulting unintentional movements constitute an additional injury hazard.

Switch off the blade and wait until the blade comes to a standstill

- before you open the impact protection flap or remove the grass collection bag.
- before you move over surfaces other than grass.

Switch off the engine and wait until the blade comes to a standstill

- before you tilt or transport the device.
- if you step away from the device, even for just a short time.
- before you adjust the cutting height.
- before you refuel.

Switch off the engine, wait until the blade comes to a standstill, and pull off the spark plug connector

- before you clean or check the device or before you carry out work on the device.
- before you unblock or unclog the discharge area.

Prior to mowing

Personal protective measures

While mowing, always wear sturdy footwear with good grip, long trousers, and gloves. Do not mow in open sandals or bare feet.

Noise is causing health problems. Use personal ear protection to avoid hearing damage. Wear safety glasses and headgear.

Preparing the mowing area

Prior to mowing, carefully check the perimeter of the lawn. Remove rocks, pieces of wood, bones, wires, and other objects that could be picked up and thrown out by the device.

Use caution when mowing

Risk of injury

Always stay within hearing range to other persons who can assist you in case of an emergency.

Danger!
Risk of injury caused by thrown out objects.
Never mow while persons, children, pets, or property are in the vicinity.

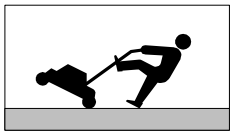
The danger zone extends for at least 15 metres.

The area in front of and to the right of the device is especially dangerous.

Keep your hands and feet away from rotating parts. Keep your distance to the discharge area when you work with the device.

Never open the impact protection flap and never empty the grass collection bag as long as the blade is running. The rotating blade can cause injuries and objects can be ejected.

Mow only in daylight or good artificial light.



Avoid mowing wet grass - slipping hazard.

Be extremely cautious when turning the device round or pulling it toward you and when moving in reverse.

Always walk slowly!

Never lift or carry the device when the engine is running.

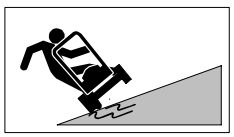
When using the device over a longer period of time, vibrations can cause disturbances in the blood supply of the hands. A generally accepted usage time cannot be determined. Use gloves.

Take breaks on time.

Have an authorised service centre check the device immediately

- if the blade hit an object.
- if the device starts to vibrate unusually severely.

Caution when mowing slopes



When mowing slopes, there is a risk of slipping and tilting!

- Only mow steep slopes when safe operation assured.
- Do not mow excessively steep slopes.
- When mowing steep slopes, meet the appropriate safety measures, e.g. use step irons.
- Always mow in horizontal directions, never up- or downwards.
- Sure footing is essential for your safety, always wear skid proof safety shoes.
- Be extremely careful when changing the direction.
- Only mow when the surface is dry and non-slip.

The device can roll away when you mow downhill. Put the device down on even surfaces only and prevent inadvertent rolling.

Mowing surfaces with fire hazard

- Carry a sufficient amount of suitable extinguishing agent.
- If side inclination is too great, fuel may leak from the carburetor or the tank. This poses a fire hazard!
- Observe the mowed surface also after moving is completed to ensure that no fire will start.

To avoid risk of fire, keep the following components free of dirt, grass, hay, leaking oil, grease, etc.:

- Engine
- Silencer (manifold, guard, clearances)
- Area around the fuel tank

When work is completed

After mowing, always close the fuel valve and the tank ventilation.

Prior to leaving the device, wait until the blade comes to a standstill and pull off the spark plug connector.

After switching it off, let the device cool down for at least 20 minutes before you store it in a dry, closed, sufficiently ventilated room.

Never store the device when there is fuel in the tank inside a building where fuel vapours might come into contact with open fire or sparks.

Use caution during maintenance and repair

Only carry out maintenance work as described in these operating instructions. Have an authorised service centre carry out all other work.

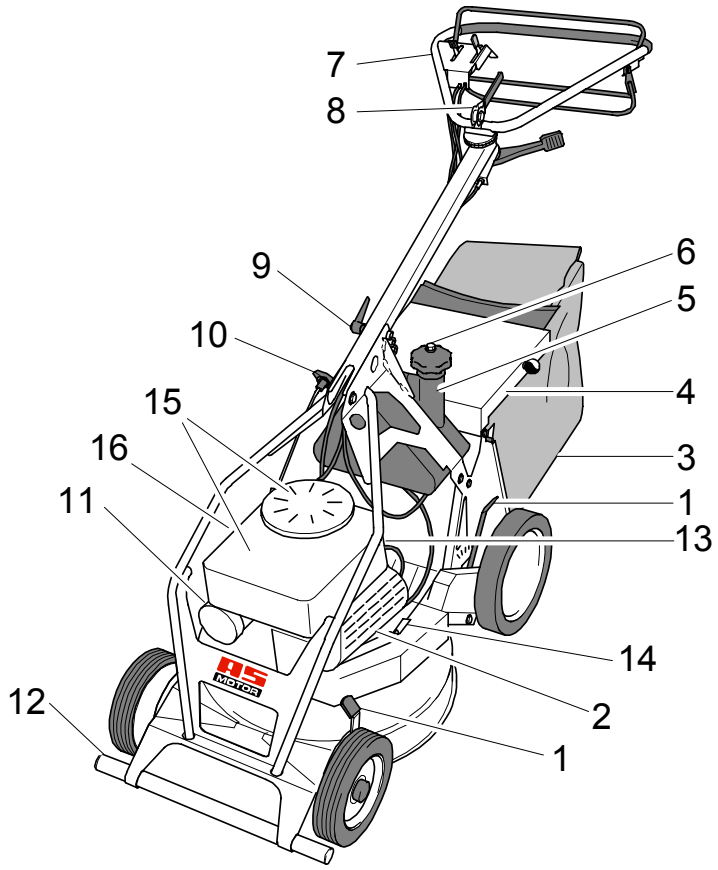
Prior to starting any maintenance work, wait until the engine comes to a standstill and pull off the spark plug connector.

We explicitly point out that, in accordance with the Product Liability Act, we are not liable for damages that were caused by our devices if

- worn or damaged parts were not repaired or replaced on time
- these damages were caused by improper repair.
- when changing a part, our original parts or parts authorised by use were not used.
- the repair work was not carried out by an authorised service station.

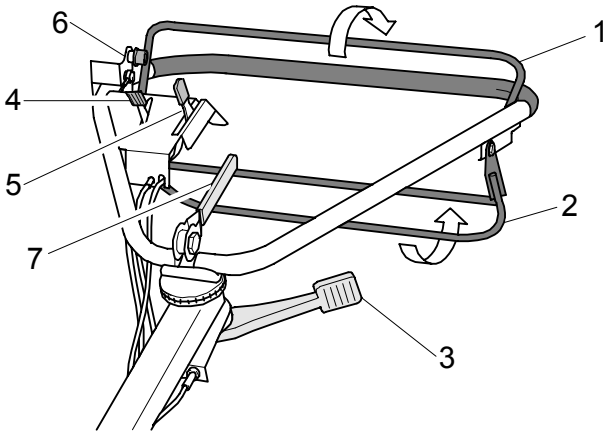
The same applies for spare parts and accessories.

Device description



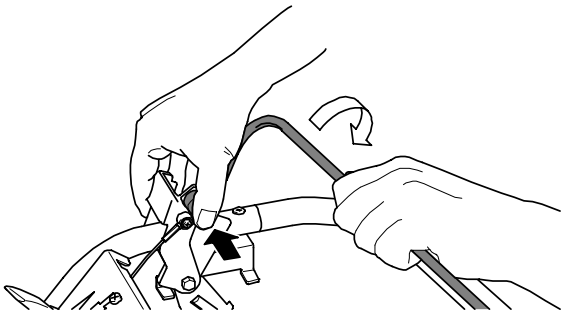
1	Cutting height adjustment	11	Air filter
2	Silencer	12	Bumper
3	Grass collection bag	13	Spark plug connector
4	Impact protection flap	14	Vario Bowden cable
5	Tank filler spout	15	Ventilation grid
6	Tank ventilation	16	Type plate
7	Handlebar with control elements		
8	Lever for lateral adjustment of handlebar		
9	Clamping lever for height adjustment of guide bar		
10	Starter grip		

Control elements



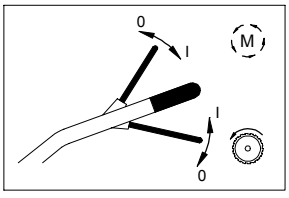
Blade clutch bar (1)

The blade clutch bar is a protective device. When you release the bar, the blade comes to a standstill within 3 seconds.



Engaging blade: Lift the blade clutch bar (**1**), engage the latch knob (**6)** and press the blade clutch bar towards the handlebar.

Disengaging blade: Release the blade clutch bar and set the accelerator lever to MIN.



Top:
Blade clutch bar

Bottom:
Drive bar

Drive bar (2)

With the drive bar, you switch the drive on and off.

Drive on:
Pull the bar toward the handlebar.

Drive off:
Release the bar.

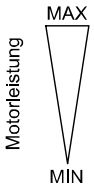
Vario lever (3)

With the vario lever, you can continuously adjust the speed of the device while the engine is running.

MIN: = slow

MAX: = fast

Accelerator lever(4)

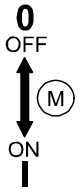


MAX: Full throttle

MIN: Neutral position

Engine stop switch (5)

With the engine stop switch, you switch the ignition on and off. If you switch off the ignition, the engine stops.



0: OFF

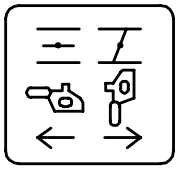
I: ON

Lever for lateral adjustment (7)

1. Release the eccentric tension lever.
2. Attention: Do not crush the Bowden cables when pivoting the handlebar. Swivel the handlebar to the side to the desired position.
3. Clamp the handlebar with the eccentric tension lever.

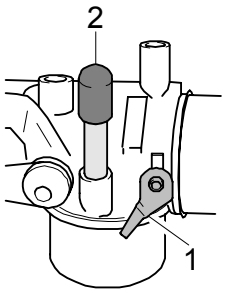
Carburetor with choke and tickler

The choke (**1**) and the tickler (**2**) are required for the cold engine start.



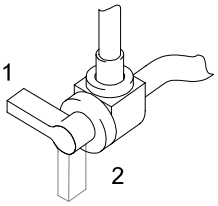
Opening the choke:
Turn clockwise to the stop.

Closing the choke:
Turn anti-clockwise to the stop.



Filling carburetor with fuel:
Press the tickler briefly until the fuel flow starts.

Fuel valve



1: Closed

2: Open

Assembly

Scope of delivery

The device is delivered in a carton.

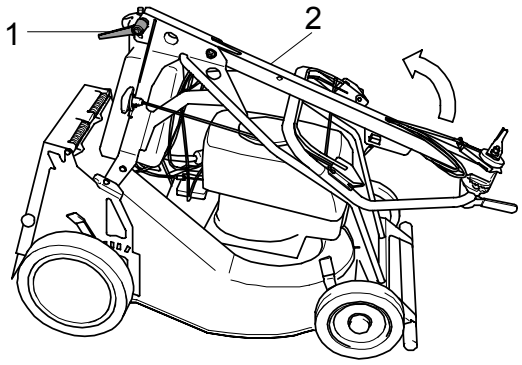
The scope of delivery includes:

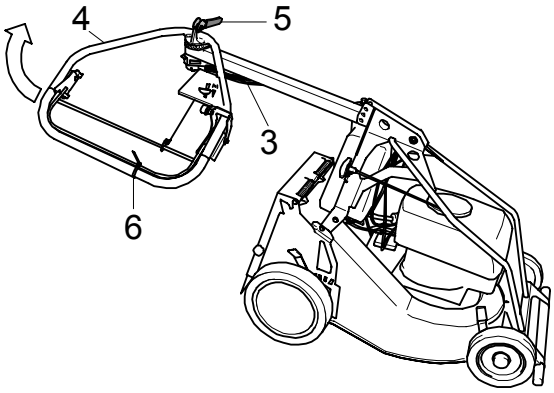
- The device.
- These operating instructions.
- The grass collection bag.
- Tool bag with small items.

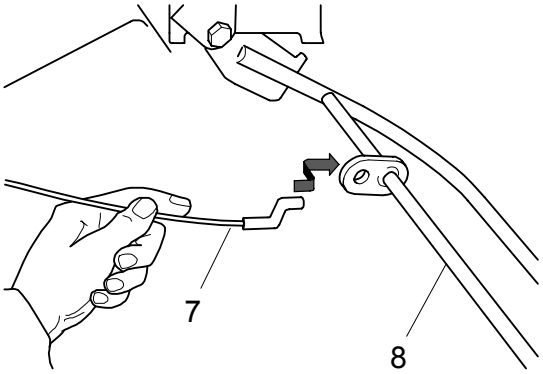
Unpacking

1. Remove the loose parts from the box.
2. Cut open the front side of the box.
3. Push the device out of the box.

Mounting guide bar and handlebar



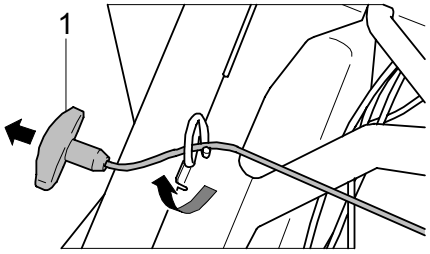




1. Push the button at the clamping lever and completely unscrew the clamping lever (**1**).
2. Move the guide bar (**2**) backwards.
3. Attention: Do not crush the Bowden cables (**3**) when moving the handlebar. Pull the handlebar (**4**) rearward in a clockwise direction and clamp it down with the eccentric lever (**5**).
4. Adjust the guide bar to the desired height and fix it with the clamping lever (**1**).

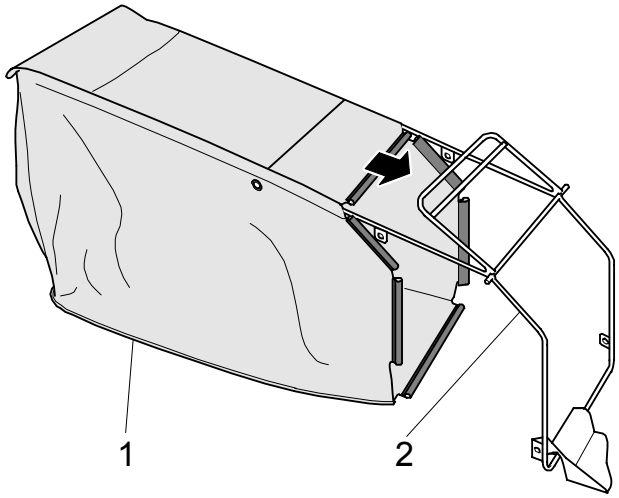
5. Attention: During the first assembly, remove the factory installed cable ties (**6**) at the handlebar so that the control elements can be actuated.
6. Insert the drive cable (**7**) into the drive bar (**8**).

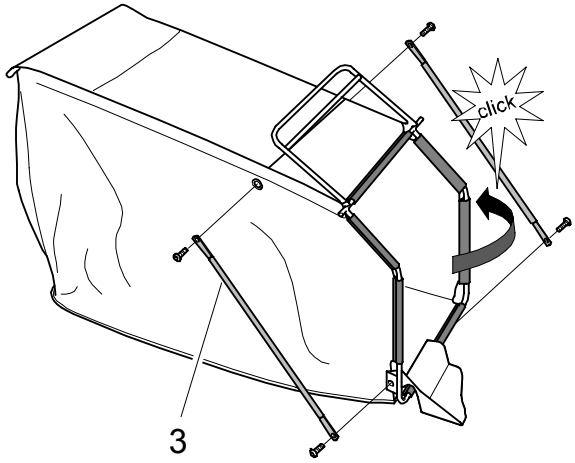
Inserting the starter rope



1. Press and continue to hold the blade clutch bar.
2. Slowly pull the starter rope at the starter grip (**1**) backwards and insert it into the guide.

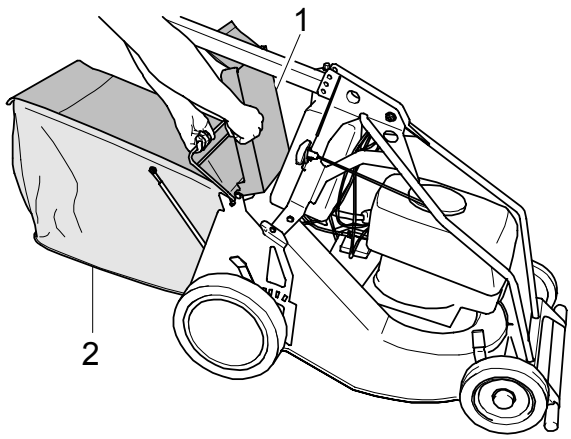
Assembling the grass collection bag





1. Pull the grass collection bag (**1**) over the frame (**2**).
2. Fasten the grass collection bag with the plastic profiles to the frame.
3. On both sides of the grass collection bag: Insert screws into the eyelets of the grass collection bag, screw them in and thus secure the bracket (**3**) to the frame (four thread forming screws).

Mounting the grass collection bag



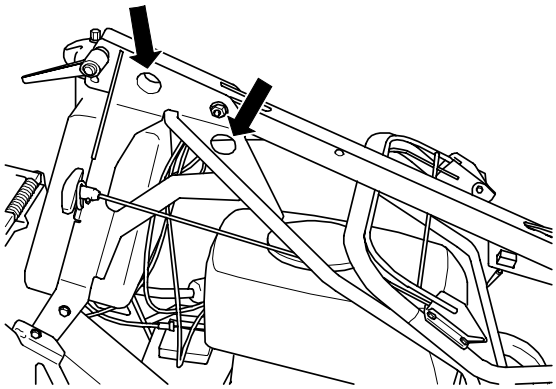
1. Switch off the blade and wait until the blade comes to a standstill.
2. Lift the impact protection flap (**1**).
3. Insert the grass collection bag (**2**) into the recesses.
4. Lower the impact protection flap onto the grass collection bag.

Transport

Switch off the engine and wait until the blade comes to a stop before you lift the device. It takes two persons to safely lift the device.

Prior to transport, let the device cool down for at least 20 minutes. Close the tank ventilation and the fuel valve.

For transport, you can fold up the handlebar and the guide bar.



Use the eyelets marked with arrows as suspension points.

When transporting by vehicle, secure the device against rolling, sliding, tilting, and fuel and oil leakage.

Information on mowing

Prior to mowing, check your device for completeness, proper functioning, and cleanliness. A dirty ventilation grid can damage the engine and a dirty protective grid at the silencer poses a fire hazard.

Frequent engagement and disengagement of the clutch increases wear of the blade drive belt and the blade brake. Especially in case of high grass, clutch engagement leads to overload.

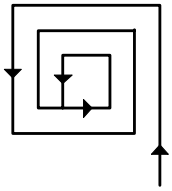
To keep the area well maintained, mow frequently and keep the grass short. Do not mow your lawn too low in dry and hot conditions because the lawn is susceptible to sun and heat damage and will look unsightly!

Only mow with a sharp and undamaged blade so that the blades of grass do not fray. Have the blade sharpened and balanced regularly (authorised service centre).

Do not mow when the grass is wet or when it is raining. The turf may be damaged and there is a danger of slipping!

Turn the device around only in already mown sections. Do not leave the device unattended while the engine is running.

For mowing, always turn the accelerator lever to full throttle to achieve the best mowing performance.



To collect the grass without blockage, we recommend, for flat terrain, to proceed according to the mowing patterns.

If the grass is extremely high, mow twice at different cutting height settings.

Prior to starting

Fuel

Use a mixture of two stroke oil and unleaded petrol (octane rating at least ROZ 91).

For mixing ratio, see chapter Mixing ratio fuel.

Recommendation: Two stroke oil TITAN 2T 100S, mixing ratio 1:100.

Your advantages:

- Halve oil consumption compared to 1:50 – more environmentally and cost friendly.
- Optimum protection of the engine for a long service life.

You can buy Fuchs “TITAN 2T 100S” from your AS-dealer:

Container	Spare part no.
1 litre (resealable bottle) 100 ml (disposable container) 40 * 100 ml (disposable containers in box)	E06830 E10286 E10561

Notice: You can find on the market ready mixed two stroke fuels. Based on our experience, the ready mixed fuels “STIHL Motomix 1:50” and “ASPEN 2-stroke” can be used. No guarantee can be given for operation of the device with other fuels and oils!

Storing fuel mixture:

The fuel mixture ages and can cause engine damages. Only mix as much fuel as you are going to use up during the next mowing.

Tanking up

Danger!
Fuel is ignited by hot engine parts. Prior to filling up, switch off the engine and wait for at least 20 minutes until the engine has cooled down. Observe the safety instructions regarding the fuel!

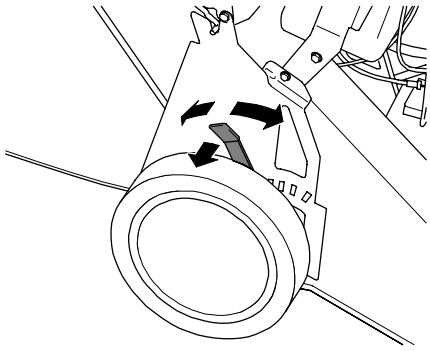
Filling in the fuel:

1. For filling, use a canister with a filler spout or use as funnel.
2. Open the canister carefully so that the existing overpressure is discharged slowly and no fuel spurts out.
3. Open the tank cap carefully so that the existing overpressure is discharged slowly and no fuel spurts out.
4. Fill the fuel tank.
5. Screw the tank cap on tightly.

Adjusting cutting height

Adjust the cutting height setting only when the engine is switched off.

Set the cutting height so that the blade does not touch the ground even in case of terrain unevenness. If the cutting height is set too high, objects can be ejected and the “clean cut appearance” can be destroyed.



1. Switch off the engine and wait until the blade has come to a standstill.
2. With the adjusting lever, adjust each wheel to the same cutting height. The cutting height can be adjusted in 1 cm increments from 3 cm to 8 cm.

Starting

Danger!
During startup, there is a risk of injury caused by the rotating blade. Make sure that no one is within the danger zone of the blade. Do not tip the device over to one side during startup.

Danger!
If after startup the carburetor does not close properly, fuel will overflow and a fire hazard occurs. Close the fuel valve and contact an authorised service centre.

Starting the device

1. Place the device onto a flat surface, not in high grass.
2. Open the fuel valve and the tank ventilation.
3. Plug on the spark plug connector.
4. Only for cold start: Close the choke at the carburetor (turn anti-clockwise).
5. Press the tickler at the carburetor until the fuel is seen to drip.
6. Set the engine stop switch to "I".
7. Put the accelerator lever to lowest engine speed position.
8. Pull the starter point slowly out until you feel resistance then pull out quickly – engine starts to run.
9. Let the starter rope retract slowly.
10. Put the accelerator lever to medium engine speed position.
11. Reopen the choke (turn clockwise).

Engaging the blade

1. Move the blade clutch bar all the way up and engage the latch knob.
2. Press the blade clutch bar downwards to the handlebar - the blade starts up.
3. For mowing, set the accelerator lever to the maximum speed.

For driving over paths, disengage the blade:

1. Release the blade clutch bar.

Driving

Danger!
Risk of injury caused by tripping or sliding while moving the mower backwards and turning it round.
Before moving in reverse, always switch off the blade!
Make sure that the area is clear of objects and watch for safe footing.

Driving

In case of a hazardous situation, switch off the drive and declutch the blade.

Drive on:

1. Switch the vario lever for the speed to "MIN".
2. Pull the drive bar towards the handlebar - device is running.
3. With the vario lever, adjust to the desired speed

Drive off:

1. Release the drive bar.

Adjusting speed:
The driving speed can be continuously adjusted with the vario lever.

Adjust the driving speed only when the engine is running.

Turning

Turn the device round only where the grass has been mowed already.

Turning round on an even surface:

1. Switch off the drive.
2. Turn the device to the desired side.
3. Switch the drive back on.

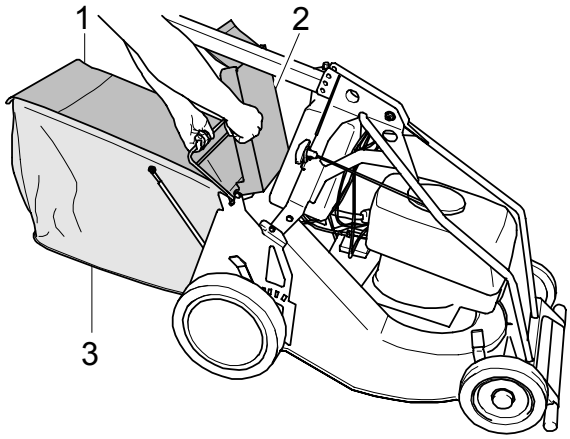
Turning round on a sloping area:

1. Keep the drive switched on.

2. Turn the device upslope.
3. Hold back the handlebar and the inner wheel.

The drive prevents sliding and supports the turn manoeuvre.

Emptying the grass collection bag



Display of fill level: It the grass collection bag is full, the sewn-on material goes down (**1**) (dust protection).

Danger!
Risk of injury caused by rotating blades.
When the engine is running, never reach into the discharge channel.

Emptying the grass collection bag:

1. Switch the accelerator lever to the lowest speed.
2. Disengage the blade and wait until it comes to a standstill.
3. Lift the impact protection flap (**2**).
4. Remove the grass collection bag (**3**).
5. Lower the impact protection flap.
6. Empty the grass collection bag completely.

Switching off and parking

Caution!
On a slope, the device can roll away.
Put the device on even ground only or secure it against rolling away.

1. Release the drive bar.
2. Turn the accelerator lever to the lowest engine speed.
3. Turn the engine stop switch to "0".
4. Wait until the blade comes to a standstill before you step away from the device.
5. Close the fuel valve and the tank ventilation.
6. Pull off the plug connector.

Maintenance and cleaning

Regular maintenance keeps your device ready for use.

If you do not observe the maintenance notices, faults may occur that are not covered by the warranty. Operational safety is endangered as well.

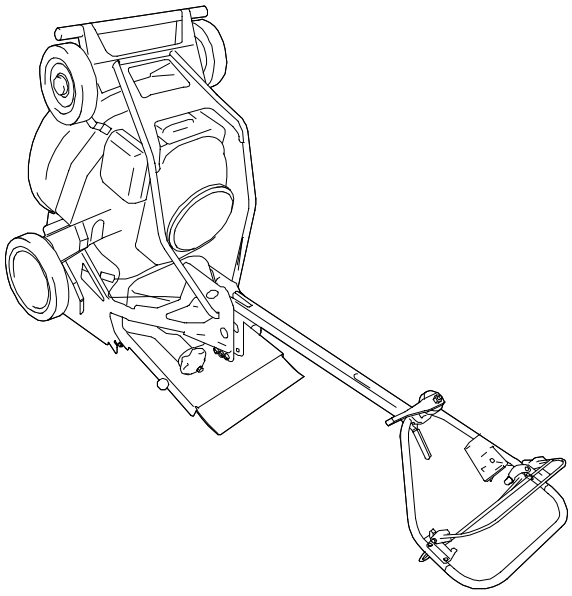
Contact your authorised service centre for checkup if you detect problems during maintenance.

Component	Action	Maintenance interval	
		Before and after each use	Annually or every 50 h
Device	Check for safe working condition.	■	▲
	Clean.	■	
	Customer service.		▲
Fuel	Check fuel level.	■	
	Is the tank cap closed?	■	
Tank, fuel valve, and fuel line	Check parts for leaks and check for good condition.	■	▲
Carburetor	Does the carburetor close again after starting?	■	▲
Ventilation grid	Clean.	■	▲
Engine cooling	Clean.		▲
Spark plug	Check/adjust.	■	
	Replace.		■▲
Air filter	Check/clean.	■	▲
	Replace.		■▲
Blade and fastening components	Check for wear and damage. See chapter Checking the blade.	■	▲
	Change.		▲
Blade brake	Does the blade function safely and does the blade come to a standstill within 3 seconds?	□	▲
Drive lever	Does the device stop when the lever is in zero position?	□	▲
V-belt	Are the V-belts tensioned correctly, without fissures, and in good condition?		▲

Component	Action	Maintenance interval	
		Before and after each use	Annually or every 50 h
Bowden cables	Check for proper function and ease of movement.	■	▲
Acceleration lever	Check for proper function.	□	▲
Chassis and impact protection	Check for rust and fissures and check the welding seams.	■	▲
	Are all protective device fastened correctly and properly functioning?	■	▲
Label	Condition of the labels.	■	▲
Flammable material	Remove easily flammable debris buildup from the engine and the device.	■	▲
Tires	Check tires and tire pressure if necessary.	■	▲

■ By the user when the engine is not running.
□ By the user when the engine is running.
▲ By the authorised service centre.

Preparations

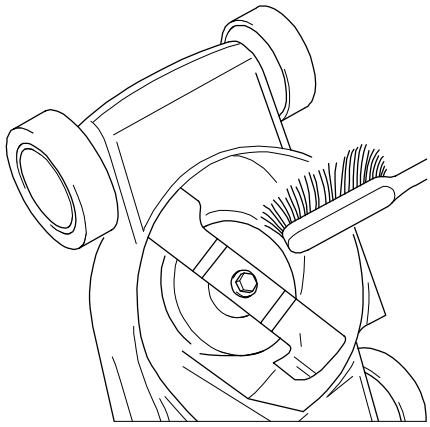


Caution! Risk of injury. Guide bar can snap back. To provide secure stand, place the guide bar onto the ground.

Prior to all maintenance and cleaning work:

1. Let the device cool down for at least 20 minutes.
2. Pull off the spark plug connector.
3. Close the fuel valve and the tank ventilation.
4. Remove the clamping lever from the guide bar and flip the guide bar forward (do not crush the Bowden cables).
5. Lift the impact protection flap all the way and tilt the device backwards according to the illustration.
6. Put the guide bar onto the ground.

Cleaning the device



After each use, you should clean the device thoroughly, especially the bottom side and the blade.

Stuck grass or dirt affect the grass discharge and the cutting quality. For a sufficient engine cooling, keep the engine cover, ventilation grid, and the engine clean.

Fire hazard! Pay special attention so that components at the silencer are clean.

For cleaning use a hand brush. Remove stubborn soiling with a wooden or plastic spatula. Clean the outer housing parts with a cloth.

Do not rinse off the device with a water jet or high pressure cleaner! Do not use aggressive cleaning agents.

Cleaning the grass collection bag

After each mowing, clean the grass collection bag thoroughly with water. The cloth must remain air-permeable. Grass clippings can clog the fabric and thus reduce the collecting power.

General inspection

To ensure a safe working condition of the device, check all nuts, bolts, screws, connections of fuel lines, air filters, etc. regularly for firm seating. Check the ignition wire and the spark plug connector for damage.

Change the damaged or used parts especially covers, grass collection bag, silencer, or fuel immediately (authorised service centre).

Maintaining the engine

Danger!
If the speed of rotation is set too high, objects can be ejected. The engine can be damaged and noise pollution increases.
Do not change the basic setting of the carburetor or the speed control.

To ensure a long service life of the engine, sufficient engine cooling is required.

Keep the
- engine cover (ventilation grid),
- silencer (protective grid) and
- cooling fins of the engine

clean at all times.

Checking the spark plug

Danger!
The ignition system generates an electromagnetic field.
Wearers of pacemakers must not work on live parts.

Soil spark plugs reduce the engine output. Clean the electrode of the spark plug with a brass wire brush. Check the electrode gap (see “Technical data”). Make sure that the insulator around the electrode is not damaged. Never use a damaged spark plug.

Tighten the spark plug with the torque indicated in the technical data.

Cleaning the air filter

Danger!
Cleaning agents pose a fire and explosion hazard.
Never clean the air filter with flammable solvents.

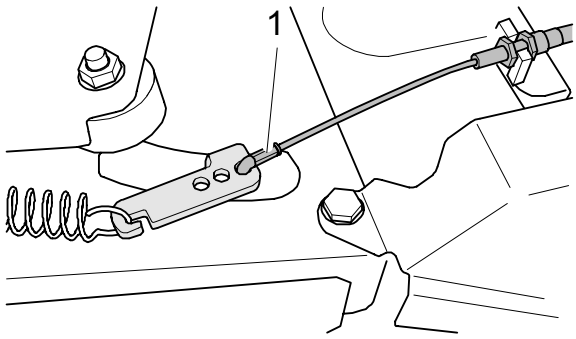
Always make sure that the air filter is clean. A dirty air filter affects the engine output and increases the fuel consumption. Independent from the number of operating hours the filter inserts should be changed at least annually. Do not operate the engine without air filter.

1. Unscrew the air filter cap.
2. Carefully pull out the filter element. Make sure that no dirt enters the interior of the air filter housing.
3. Carefully clean the interior of the air filter housing.
4. Clean the filter element by brushing off or blowing out all the dirt (replace if necessary).
5. Re-insert the filter element.
6. Screw the air filter cap firmly back on.

Re-adjusting the drive

Once the belts of the vario drive wear down, they start slipping. The drive of the mower does not work any more under load (e.g. device stops on a slope or slows down).

Re-adjust the drive as described in the following:



1. While the engine is running, move the vario lever to position "MIN".
2. Switch off the engine.
3. Move the vario lever to position "MAX" (vario cable (**1**) loosens).
4. Remove the cable (**1**) and insert it into the next eyelet in the direction of the spring.
5. While the engine is running, move the vario lever back and forth to re-tension the cable.

If the adjustment does not show any improvement or if the cable is already in the outmost position, have an authorised dealership check the device.

Checking the blade

Danger!
Improperly mounted and maintained blades pose a severe injury hazard.
Work at the blade shall only be performed by an authorised service centre.

Work on the blade requires special qualifications because an unbalance test is required and the torques must be observed.

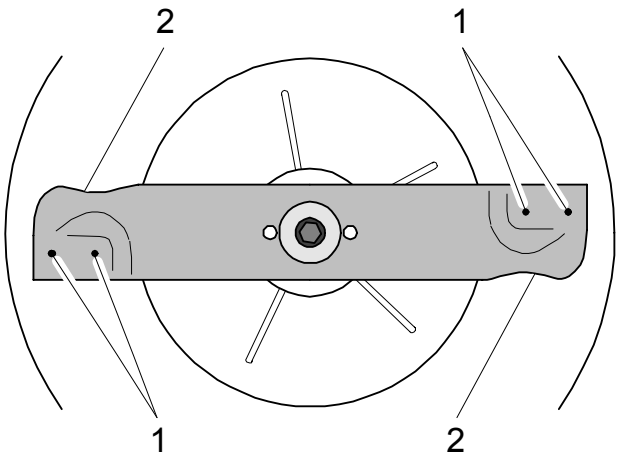
Check the blade and slip clutch regularly before and after each mowing and when there are significant changes.

Vibrations indicate that the blade is worn excessively or on one side. When a rubber element between engine and housing breaks, vibrations can result.

Improperly sharpened blades increase the device load and result in fatigue cracks and breakage!

Ejected pieces can cause severe injuries.

Blade change



It is absolutely necessary to change the blade:

- When one of the wear markings (**1**) was reached. Original blades are engraved with wear markings (marking in form of a ball-shaped imprint on the rear side of the blade approx. 20 mm behind the cutting edge).
- When the thickness of the blade at the rear edge of the vane (**2**) or at another point is below 1 mm (exception: cutting edge).
- At the latest every 2 years or every 50 operating hours, whether there is wear or not. The material deteriorates, may show cracks and this can endanger persons and material goods.

Checking the blade clutch

Check the blade clutch for proper function by disengaging the blade. The blade must come to a standstill from full speed within less than 3 seconds. Contact an authorised service centre if this is not the case.

Storage

Storing the device

Keep the device in a closed, dry, and well ventilated room and out of reach of children. Always eliminate all problems of the device before you store it so that the device is always in a safe-to-operate state. Let the engine cool down before you store the device in closed rooms.

Longer storage

1. Observe the safety instructions regarding the handling of fuel.
2. Draining fuel tank: Put a piece of a tube on the fuel valve and fill the fuel in an adequate fuel container.
3. Emptying carburetor: Start the engine and let it run until it stops on its own.
4. Clean the device thoroughly.
5. Touch up defects in painting (for spray paint, see Accessories).
6. Performing corrosion protection on the engine:
   - Unscrew the spark plug.
   - Fill a tablespoon of engine oil into the spark plug opening.
   - Pull the starter rope slowly until you get resistance (oil distribution in the cylinder).
   - Re-insert the spark plug and screw in fully.
   - Do not fit the spark plug connector!

In autumn, have your device checked by an authorised service centre!

Restarting

If you want to start the device after a longer storage, carry out the tasks described in chapter Maintenance.

Spare parts

The reliable and safe operation of the device also depends on the quality of the spare parts used. Only use original spare parts and accessories that were approved by “AS-Motor Germany”. When foreign parts are installed, the warranty and guarantee shall be void for the foreign part and for the device and for any resulting damage.

Inform your authorised service centre about the device type and serial number of your devices when you order spare parts.

Wear parts

Some parts are wear parts. They wear during use and must be replaced. The warranty does not cover the following parts:

Blades, cutting blades, cutter bars, blade bolts, sliding plates, V-belt, chains, Bowden cables, starter ropes, pressure plates, air filters, spark plugs, disc springs, lock washers, fuses, discs, thrust plates, pressure discs, protection skirts, impact protection, wheels, tires.

Accessories

Mulching accessories E09162

Spray paint 400 ml, colour orange E04606

Operating hours counter E10740

Disposal

Grass clippings must not be thrown into the waste but should be composted.

Dispose of waste oil and fuel in accordance with the local regulations or return it to an oil shop.

Packaging, device, and accessories are made of recyclable materials and must be disposed off accordingly.

Warranty

The conditions of the warranty can be found on the reverse side of your warranty card. Send the filled-out warranty card immediately after the purchase of your device to “AS-Motor Germany” or the supplier. Otherwise, the warranty is no longer valid.

Preserve the proof of purchase or the warranty card that was filled out by the vendor.

Troubleshooting

The following table contains the most frequent problems and their elimination. If more problems occur, contact the closest authorised service centre.

You can find an authorised service centre on our home page www.as-motor.de.

Problem	Possible cause	Remedy
Engine does not start	Engine stop switch is set to OFF.	Set engine stop switch to ON.
	Fuel valve is closed.	Open fuel valve.
	Tank ventilation screw is closed.	Open tank ventilation screw.
	No fuel is in the tank.	Refill fuel.
	Choke is open.	Close the choke.
	Engine was flooded due to too many start attempts.	Unscrew spark plug and start several times when the fuel valve is closed, dry the spark plug and screw it back in.
	Spark plug connector is pulled off.	Observe safety instructions! Put spark plug connector back on.
	Air filter is soiled.	Clean air filter (see also Maintenance and cleaning).
	Spark plug is sooted, damaged or incorrect electrode gap.	Clean spark plug and check electrode gap (see also Maintenance and cleaning). Replace spark plug if necessary.
	Housing of the mower is jammed.	See also Maintenance and cleaning.
	Poor quality, dirty, or old fuel.	Clean fuel system (authorised service centre). Always use a fresh mixture of two stroke oil and unleaded regular fuel.
Engine starts badly or runs irregularly	Choke is closed.	Open choke.
	Air filter is soiled.	Clean air filter (see also Maintenance and cleaning).
	Poor quality, dirty, or old fuel.	Always use fresh fuel.

Problem	Possible cause	Remedy
	Spark plug is sooted, damaged, or incorrect electrode gap.	Clean spark plug and check electrode gap (see also Maintenance and cleaning). If necessary, replace spark plug.
	Housing of mower is jammed.	See also Maintenance and cleaning.
No drive when drive bar is actuated	Vario cable is insufficiently tensioned.	Re-tension (see chapter Maintenance - re-adjusting the drive).
	Drive belt is insufficiently tensioned.	Authorised service centre.
The blade does not rotate	V-belt is insufficiently tensioned or damaged.	Authorised service centre.
	Bowden cable is defective.	Authorised service centre.
The blade slides	Replace friction discs.	Authorised service centre.
Strong vibrations during operation	Unbalance at the blade caused by incorrect sharpening or chips on the blade.	Have blade balanced and re-sharpened by an authorised service centre. Replace a damaged blade immediately.
	Blade drive shaft is bent by collisions with foreign objects.	Authorised service centre.
	Engine fastening is loose.	Authorised service centre.
	Blade fastening is loose.	Authorised service centre.
Irregular noises	Loose fastening elements.	Authorised service centre.
	Silencer defective.	Authorised service centre.
Engine gets hot	Ventilation grid is dirty	Clean ventilation grid.
	Cooling fins of the engine are dirty.	Have cooling fins cleaned by authorised service centre.
Uneven cut, lawn becomes unsightly	Blade is dull or worn.	Have blade balanced and re-sharpened by an authorised service centre. Replace a damaged blade immediately.
	Speed is too high proportionately to the cutting height.	Reduce speed and/or select the correct cutting height.
	Housing of mower is heavily soiled.	Clean.

Problem	Possible cause	Remedy
Discharge channel is jammed	Mowed grass was too long or too damp.	Adjust cutting height and mowing speed to the mowing conditions.
	Blade is worn.	Authorised service centre.
	Engine speed too low despite full power.	Authorised service centre.
The device does not stop	Drive belt does not declutch.	Authorised service centre.
The engine does not switch off	Switching off system is defective.	Close the fuel valve. Authorised service centre.

Mixing ratios fuel

Fuel	Two-stroke oil	Only with Titan 2T 100S
(Octane rating ROZ 91 min.)	**1:50**	**1:100**
Litre(s)	Litre(s) (=ml/cm^3)	Litre(s) (=ml/cm^3)
1	0.02 (20)	0.01 (10)
2	0.04 (40)	0.02 (20)
3	0.06 (60)	0.03 (30)
4	0.08 (80)	0.04 (40)
5	0.1 (100)	0.05 (50)
10	0.2 (200)	0.1 (100)
20	0.4 (400)	0.2 (200)

Technical data

Type	AS530/2T MK-Kat
Range of application (temperature)	5 – 30 °C
Engine, type Manufacturer Type Cylinder capacity Performance Engine speed	One cylinder two stroke engine with catalyser AS-MOTOR GERMANY AS 165 165 cm^3 3.4 kW (4.6 PS) 2600 min^{-1}
Spark plug Torque Electrode gap for best starting behaviour	Bosch W7RAC / Beru 14/7AU / Champion L86 / Denso W20FS-U / NGKB6HS-5 25 Nm 0.5 mm
Cutting device, type Cutting width Cutting height adjustment Plant growth	Blade 53 cm Single wheel 30 – 80 mm, in 6 levels up to approx. 40 cm
Starting device	Rope start
Drive	Rear wheel drive with variomat for continuous adjustment of speed (2.5 – 4.5 km/h)
Maximum area coverage	approx. 2300 m^2/h
Measures and weight Transport size with packaging L/W/H Max. tire dimensions L/W/H Weight	 120/60/71 cm 164/57/99 cm 66 kg
Capacities Fuel tank Grass collection bag	 5 litres 75 litres with fill level indicator
Sound level Measured sound level L_{WA} Guaranteed sound level L_{WA} Sound level at working place L_{pA}	 97 dB according to DIN EN 836 98 dB according to DIN EN 836 85 dB according to DIN EN 836
Vibrations emission value Hand-arm-vibrations $a_{h,w}$ Measurement uncertainty U	 2.5 m/s^2according to DIN EN 836 2 m/s^2

AS-MOTOR GERMANY GmbH & Co. KG
Ellwanger Straße 15
D-74424 Bühlertann
www.as-motor.de

Declaration of conformity

We declare that the lawnmower type with serial number	AS 530/2T MK-Kat starting from 020610020001
corresponds to the following guidelines:	- 2006/42/EC - 2000/14/EC - 2004/108/EC - 97/68/EC
Applied standards:	EN 836
Applied conformity assessment procedures:	Annex VI
Measured sound level: Guaranteed sound level:	97 dB (A) 98 dB (A)

Party involved:
TÜV Rheinland Product Safety GmbH, D-51105
Köln, Am Grauen Stein

Person authorised to compile the relevant technical documentation:
Frank Einsiedler
AS-MOTOR GERMANY GmbH & Co. KG
Ellwanger Straße 15
D-74424 Bühlertann

Bühlertann, July 2010	By proxy Frank Einsiedler Head of development	Christoph Weber Managing director

AS-MOTOR GERMANY GmbH & Co. KG
Ellwanger Straße 15
D-74424 Bühlertann
www.as-motor.de

Professional technology for gardens and landscapes

Allmäher®	Manoeuvrable meadow mower for extensive green area care. The Allmäher reliably shreds high grass, scrub, and weeds also on steep slopes and in difficult terrain. The grass cuttings are left to fertilise the ground so there is no more raking grass.
Ride-on Allmäher®	Ease of use and high area coverage all combined in a compact lawn mower. Low centre of gravity, optimum weight distribution, and broad wheel base provide you with the best performance on slopes and power reserves for shredding high plant growth. Also available in an all-wheel version providing the extra traction for demanding applications and for superior safety on slopes.
Rear discharge mower	Professional lawn mower with rear discharge. With wheel drive and infinite speed regulation for exceptional cutting and catching performance in any situation.
Rotary mower	The economic alternative to bar mower. Ideal for fodder production. The grass is not shredded and placed into a pile on the side.
Flail mower	The flail mover blades are supported movably and avoid rocks and other obstacles and chop the cuttings several times. The steel housing is 3 mm thick and offers very high security against foreign objects that were ejected and blown around and catches them safely.
Side discharge mower	This solid allrounder has a side discharge, wheel drive, and a housing of 3 mm thick plastic-coated steel. Also available in an all-wheel drive version and infinite speed regulation (Variomatic).
WeedHex	Removes weeds carefully, quickly, and without the use of chemicals: on transport surfaces, walls, curbs, and between interlocking blocks. The patented pivoting brush system goes easy on surfaces and is environment-friendly regarding harmful herbicides.